

CLAIMS

What is claimed is:

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1. A die cutting system for forming patterns from a sheet of material, comprising:
a press including first and second members movable toward and away from one another, said first member including a die retaining element associated with a die receiving surface thereof, said second member including a sheet supporting surface oriented to oppose said die receiving surface; and
at least one die securable to said first member by said die retaining element, said die comprising a thin, unitary member including a substantially planar plate and at least one cutting edge protruding from a surface of said substantially planar plate.

2. The die cutting system of claim 1, wherein said press includes a biasing element for moving at least one of said first and second member toward the other of said first and second member.

3. The die cutting system of claim 2, wherein said biasing element includes a pair of pivotally connected handles.

4. The die cutting system of claim 2, wherein said biasing element includes a handle that moves relative to a substantially stationary base.

5. The die cutting system of claim 1, wherein said die retaining element comprises magnetic material.

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6. The die cutting system of claim 5, wherein at least said plate comprises a material that is attracted to a magnetic field.

7. The die cutting system of claim 1, wherein said die comprises steel.

8. The die cutting system of claim 1, wherein said die retaining element mechanically secures said die to said die receiving surface.

9. The die cutting system of claim 1, wherein said sheet supporting surface of said second member comprises a cushioning element.

sub A 37 10. The die cutting system of claim 1, wherein said die further includes at least one ejection element between adjacent portions of said at least one cutting edge.

11. The die cutting system of claim 1, wherein said at least one ejection element is compressible and resilient.

12. An apparatus for forcing a die through a sheet of material, comprising:
a first member including:
a die receiving surface; and
a die retaining element associated with said die receiving surface, said die retaining element configured to receive a substantially planar die;
a second member including:
a substantially planar sheet supporting surface oriented to oppose said die receiving surface; and
a biasing element associated with at least one member of said first and second members so as to move said at least one member toward the other of said first and second members.

13. The apparatus of claim 12, wherein said die retaining element is magnetic.

14. The apparatus of claim 12, wherein said die retaining element mechanically secures a substantially planar die to said die receiving surface.

15. The apparatus of claim 12, wherein said second member includes a cushioning element that forms at least a portion of said substantially planar sheet supporting surface.

16. The apparatus of claim 12, wherein said biasing element is configured to be held by and operated with a hand of a user.

17. The apparatus of claim 12, wherein said biasing element comprises a handle moveable relative to a base member by which said second member is supported.

18. The apparatus of claim 17, wherein said base member is configured to be supported upon a substantially flat surface.

19. A method for forming a pattern from a sheet of material, comprising:
providing a substantially planar die including a plate and at least one cutting edge protruding therefrom; and
manually biasing said substantially planar die against the sheet and a substantially planar sheet supporting surface located opposite the sheet.

20. The method of claim 19, wherein said manually biasing comprises forcing a member carrying said substantially planar die toward said sheet and said substantially planar sheet supporting surface.

21. The method of claim 20, wherein said forcing includes applying force to at least one handle of a press associated with said member.

22. The method of claim 21, wherein said forcing comprises squeezing two handle members of a hand-held press toward one another.

23. The method of claim 20, further comprising securing said substantially planar die to said member.

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